

(2) Reduces the number of fuel assemblies allowed to be stored in the spent fuel pool (SFP) from 3229 to 2959. The fuel will be prohibited from being stored in 270 specific storage rack locations. This is necessary to support the elimination of all credit for Boraflex.

(3) Changes the required spent fuel pool k_{eff} to ≤ 0.95 . This is necessary to support the elimination of all credit for Boraflex.

(4) Eliminates the design features requirements on new fuel storage, since Millstone Unit No. 1 (MP1) is a plant that has ceased power operation and will no longer receive new fuel.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

Accidents previously evaluated are the fuel handling accidents[as] described in the Decommissioned Safety Analysis Report (DSAR), and a seismic event, which is considered as part of the spent fuel rack design.

Since there are no changes to plant hardware, nor any changes in how fuel is moved, there are no changes to the probability of a fuel handling accident. The consequences of a fuel handling accident are not affected, since none of the inputs to the fuel handling accident is affected.

The proposed changes affect the criticality analysis of the spent fuel storage racks. The spent fuel racks will continue to be able to perform their design function, which is to maintain the stored fuel in a sub-critical and cooled condition under all normal and postulated accident conditions. There are no physical hardware changes to the plant from these proposed changes. The revised criticality analysis submitted with these proposed changes demonstrates that fuel will be maintained in a sub-critical condition during all normal and postulated accident conditions, including the seismic event. Since there is no change in the ability of the fuel storage racks to maintain a sub-critical condition due to a seismic event, there is no change in the probability or consequences of this accident.

Reducing the amount of fuel storage is a conservative action, and the spent fuel racks were designed and licensed to allow empty, partially filled, or completely full storage racks. Thus the fuel racks will continue to be able to perform their design function to maintain the fuel in a coolable condition.

The change to the new fuel storage racks is to delete the Technical Specification requirements for the new fuel storage k_{eff} limits. Since MP1 is a plant that has ceased power operation and will no longer receive new fuel, there is no need for these Technical Specification requirements. There are no new

fuel related accidents previously analyzed, therefore this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

In summary, the proposed changes do not involve an increase in the probability or consequences of an accident previously evaluated.

2. The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

Since there are no changes to the plant equipment, there is no possibility of a new or different kind of accident being initiated or affected by equipment issues.

Reducing the number of fuel assemblies to be stored in the pool, and discontinuing credit for Boraflex are conservative changes that do not introduce any new or different kind of failure modes.

The changes made primarily affect the nuclear criticality analysis and do not create a new or different kind of accident. Changes in eliminating Boraflex credit, restricting fuel in certain storage locations, and changing the allowable k_{eff} limit are all impacts to the nuclear criticality analysis for the SFP. The SFP criticality analysis is part of the basic design of the system and is not an accident. The ability to maintain the SFP k_{eff} less than or equal to 0.95, as well as within the 10 CFR Part 50 Appendix A, "General Design Criteria for Nuclear Power Plants," Criterion 62 "Prevention of Criticality in Fuel Storage and Handling" (Reference 6) criteria of sub-critical, have been evaluated. Criticality impacts are more appropriately discussed under the margin of safety criterion.

The change to the new fuel storage racks is to delete the Technical Specification requirements for the new fuel storage k_{eff} limits. Since MP1 is a plant that has ceased power operation and will no longer receive new fuel, there is no need for these Technical Specification requirements. Since Millstone 1 currently has no new fuel and new fuel cannot be received, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

In summary, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed change does not involve a significant reduction in a margin of safety.

The margin of safety relevant to the SFP is defined as (1) SFP k_{eff} remains sub-critical by an acceptable margin, and (2) the spent fuel in the SFP remains adequately cooled so that the fission product barriers remain intact.

The industry and regulatory accepted value for [the] required sub-criticality margin[s] in the SFP is to ensure that the k_{eff} of the SFP remains ≤ 0.95 under all normal and postulated accident conditions. This is documented in the Standard Review Plan, Regulatory Guide 1.13, and ANSI/ANS-57.2, "American National Standard Design Requirements for LWR Spent Fuel Storage Facilities at Nuclear Power Plants." The current MP1 Technical Specifications require a more conservative value of 0.90 for SFP k_{eff} . The proposed Design Features Technical

Specification changes the maximum SFP k_{eff} from 0.90 to 0.95. This is not a significant reduction in the margin to [of] safety since the proposed value of 0.95 is consistent with the accepted regulatory guidance for [the] sub-criticality margin. The proposed criticality analysis demonstrates that the SFP k_{eff} remains ≤ 0.95 on a 95/95 basis under all normal and postulated accident conditions, thus the required margin of criticality safety has been maintained.

The proposed changes conservatively reduce the amount of fuel that can be stored, and therefore do not affect the SFP cooling analysis. Therefore, the spent fuel in the SFP remains adequately cooled so that the fission product barriers remain intact.

The removal of Technical Specification requirements for the new fuel storage k_{eff} limits does not affect the margin of safety since new fuel can no longer be received.

Therefore, based on the above, the proposed changes do not involve a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

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Duke Energy Corporation, Docket Nos. 50-269, 50-270, and 50-287, Oconee Nuclear Station, Units 1, 2, and 3, Oconee County, South Carolina.

Date of amendment request: October 16, 2001; as supplemented by letters dated May 20, September 12, and November 21, 2002; and January 27, September 22, and November 20, 2003.

Description of amendment request: The proposed amendments would revise the Technical Specifications to incorporate changes resulting from the use of an alternate source term and the implementation of several plant modifications. Publications of the Proposed No Significant Hazards Consideration Determination and Opportunity for Hearing have already appeared in the **Federal Register** on January 22, 2002 (67FR2922) and October 14, 2003 (68FR59215). The November 20, 2003, submittal contained a revised No Significant Hazards Consideration Determination.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below: